

Firearms/Toolmarks Discipline Development and Validation of New Technical Procedures

1 Scope

This procedure applies to Firearms/Toolmarks Discipline (FTD) personnel conducting development and validation of new technical procedures or methods for use in the following categories of testing:

- Firearms
- Toolmarks
- Serial Number Restoration

2 Internally Developed Technical Procedures

The development and technical reviews will be recorded using the *FTD Development & Validation of New Technical Procedures Review Form* (Appendix A) and will include the supporting records for the procedures being developed and/or validated. At a minimum, development procedures and validation studies will address the criteria as outlined in the *LOM Practices for Developing Methods and Validating Technical Procedures*. In addition, FTD personnel using, internally developed procedures will be competency tested prior to conducting casework. Technical review, FTD Technical Leader review, approval records and validation study records, including competency tests, will be maintained at the appropriate laboratory location(s).

3 Externally Developed Technical Procedures

Prior to applying an externally developed procedure into casework, FTD personnel must demonstrate and record that the technical procedures are valid and perform as expected in the FBI Laboratory location(s). This will be done in accordance with the *LOM Practices for Developing Methods and Validating Technical Procedures* and recorded under the Review of the Validation of a New Procedure section of Appendix A. In addition, FTD personnel using externally developed procedures will be competency tested prior to use in casework. Technical reviews, approval records, and validation study records, including competency tests, will be maintained at the appropriate laboratory location(s).

4 Procedure Modifications

Any modifications to procedures will be recorded in the examination records or on a *Major Deviation Request* (7-258) depending on the nature of the change. This will be performed in accordance with the *LOM Practices for Authorizing Deviations*. If the modification will be permanent, it will be incorporated into a revised issue of the standard operating procedures.

5 References

ASCLD/LAB-International Supplemental Requirements for the Accreditation of Forensic Science Testing Laboratories, American Society of Crime Laboratory Directors/Laboratory Accreditation Board, Garner, NC, 2011.

ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories, International Organization for Standardization, Geneva, Switzerland, 2005.

FBI Laboratory Quality Assurance Manual, Federal Bureau of Investigation, Laboratory Division, latest revision.

FBI Laboratory Operations Manual, Federal Bureau of Investigation, Laboratory Division, latest revision.

Rev. #	Issue Date	History
3	06/01/15	Changed document to record throughout. Added practice to Section 1. Included methods in Section 1. Changed technician to appropriately trained employees in Sections 2 and 3. Removed library from Sections 2 and 3. Updated references. Updated form (Appendix A)
4	10/02/17	Original issue for Firearms/Toolmarks Discipline, which includes Firearms/Toolmarks Unit and Scientific Analysis Unit - Toolmark Group. Existing document modified to include the Huntsville, AL satellite location.

Approval

Redacted - Signatures on File

Appendix A: *FTD Development & Validation of New Technical Procedures Review Form*

Redacted - Form on File